

**Notice of Allowability**

Application No.

09/822,805

Examiner

Aaron W. Carter

Applicant(s)

JAVIDI ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to papers filed on September 19, 2005.
2. ☒ The allowed claim(s) is/are 1-4,6-11,13-19,21-29,31-47,51-67,74-77 and 81-84.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                               |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>10/6/05</u> |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                                       |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance                      |
|   | 9. <input type="checkbox"/> Other _____   |

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Daniel P. Lent (Reg. No. 44,867) on October 6, 2005.

The application has been amended as follows:

As to claim 16, in line 1, please delete the phrase – "A storage medium encoded with a set of data created by:" – and insert in its place the phrase – "A computer readable medium having computer-executable instructions for performing the following:".

As to claim 17, in line 1, please delete the word – "storage" – and replace it with the phrase – "computer readable".

As to claim 18, in line 1, please delete the word – "storage" – and replace it with the phrase – "computer readable".

As to claim 19, in line 1, please delete the word – "storage" – and replace it with the phrase – "computer readable".

As to claim 21, in line 1, please delete the word – “storage” – and replace it with the phrase – “computer readable”.

As to claim 22, in line 1, please delete the word – “storage” – and replace it with the phrase – “computer readable”.

As to claim 23, in line 1, please delete the phrase – “A storage medium encoded with a set of data created by:” – and insert in its place the phrase – “A computer readable medium having computer-executable instructions for performing the following:”.

As to claim 24, in line 1, please delete the word – “storage” – and replace it with the phrase – “computer readable”.

As to claim 25, in line 1, please delete the word – “storage” – and replace it with the phrase – “computer readable”.

As to claim 26, in line 1, please delete the word – “storage” – and replace it with the phrase – “computer readable”.

As to claim 59, in line 1, please delete the word – “storage” – and replace it with the phrase – “computer readable”.

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As to claim 60, in line 1, please delete the word – “storage” – and replace it with the phrase – “computer readable”.

As to claim 61, in line 1, please delete the word – “storage” – and replace it with the phrase – “computer readable”.

As to claim 27, in line 1, please delete the phrase – “A storage medium encoded with a set of data created by:” – and insert in its place the phrase – “A computer readable medium having computer-executable instructions for performing the following:”.

As to claim 28, in line 1, please delete the word – “storage” – and replace it with the phrase – “computer readable”.

As to claim 29, in line 1, please delete the word – “storage” – and replace it with the phrase – “computer readable”.

## **DETAILED ACTION**

### ***Response to Amendment***

2. In response to applicant's amendment received on September 19, 2005, all requested changes to the specification and claims have been entered. Claims 5, 12, 20, 30, 48-50, 78 and 79 have been cancelled.

### ***Allowable Subject Matter***

3. Claims 1-4, 6-11, 13-19, 21-29, 31-47, 51-67, 74-77 and 81-84 are allowed.

The following is an examiner's statement of reasons for allowance:

As to claims 1, 8, 16 and 27, none of the prior art teach or fairly suggest wherein correlating comprises transforming the hologram of the reference and input objects and multiplying the transformation of the hologram of the reference object by the transformation of the hologram of the input object, in combination with the other limitations of the claims. The prior art of Lom (already of record) discloses a pattern recognition process including generating a hologram of a reference and input object and correlating the holograms to generate a set of correlation peaks, but does not teach or fairly suggest the correlation as set forth in the limitations of the claims above.

As to claim 15 and 23, none of the prior art teach or fairly suggest where defining a window within the hologram of the input object consists of the using the equation defined in the claims, in combination of the other limitations in the claims. The prior art of Lom (already of record) discloses a pattern recognition process including generating a hologram of a reference and input object and defining a window within the hologram of the input object, but does not teach or fairly suggest defining the window in accordance with the equation set forth in the limitations of claims 15 and 23.

As to claim 46, none of the prior art teach or fairly suggest autocorrelating the first hologram and comparing the autocorrelating the first hologram with the correlation of the first hologram with the second hologram, in combination with the other limitations of the claim. The prior art of Lom (already of record) discloses a pattern recognition process including generating a hologram of a reference and input object and correlating the holograms to generate a set of correlation peaks, but does not teach or fairly suggest the autocorrelating the first hologram with the correlation of the first hologram with the second hologram as set forth in the limitations of claim 46.

As to claims 81-84, none of the prior art teach or fairly suggest wherein correlating comprises of displaying/forming the holograms of the input object and the reference object on electrically or optically addressable spatial light modulators, addressing the electrically or optically addressable spatial light modulators with a reference beam and processing the holograms optically to generate a set of correlations peaks, in combination with the other

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limitations of the claims. The prior art of Lom (already of record) discloses a pattern recognition process including generating a hologram of a reference and input object and correlating the holograms to generate a set of correlation peaks, but does not teach or fairly suggest the correlation process as set forth in the limitations of claims 81 and 83.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron W. Carter whose telephone number is (571) 272-7445. The examiner can normally be reached on 8am - 4:30 am (Mon. - Fri.).

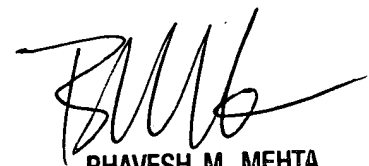
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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